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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,440	12/04/2003	I-Jin Yang	B-5315 621542-5	2113

36716 7590 11/23/2004

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EXAMINER

BURCH, MELODY M

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/729,440

Applicant(s)

YANG, I-JIN

SJ

Examiner

Melody M. Burch

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/4/03, 5/10, 5/20</u>   | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> |

Continuation of Attachment(s) 6). Other: and 6/7/04 continuation of IDS list.

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**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
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***Oath/Declaration***

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration has reviewed and understands the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration.

Examiner notes that the oath reads "including th claims" instead of --including the claims--.

***Drawings***

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to because of the following informalities: In lines 24 and 25 of pg. 2 of the specification element number "14" is used to designate both the inlet check ball and the retainer.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 15. The phrase "linear inner circumferential surface" in the last line of the claim is indefinite. It is unclear to the Examiner what Applicant intends to claim with the recitation of a linear circumferential surface since a circumferential surface is arc shaped and not linear (of or relating to a straight line). Clarification is required. The remaining claims are indefinite due to their dependency from claim 15.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-10, 12, and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6082244 to Siegel et al.

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Re: claim 1. Siegel et al. show in figure 1 a pump for antilock brake system comprising a motor described in col. 3 lines 45-46 and including element 56, portion 56 of the motor installed in a bore shown surrounding elements 20 and 56 which is provided in a predetermined portion of a modular block 16, a plug 62 mounted to an end of the bore to be opposite to the motor, a piston 20,60 provided in the bore to reciprocate in the bore by the motor, and a sleeve 18 fitted into the bore to guide a reciprocating motion of the piston.

Re: claim 2. Siegel et al. show the limitation wherein the piston comprises a low-pressure piston part 20 provided at a predetermined position which is adjacent to the motor and a high pressure piston part 60 extending from the low-pressure piston part toward the plug, and an inlet path 30 provided between the low-pressure piston part and the high pressure piston part, and along the high pressure piston part as shown.

Re: claim 3. Siegel et al. show in figure 1 the limitation wherein the sleeve has, around an outer circumferential surface thereof, a step shown above and to the right and left of element 70 so that the sleeve is fitted into the plug in a press-fitting method as described in col. 3 lines 53-54 while surrounding an outer circumferential surface of the high-pressure piston part, and is mounted in the bore along with the plug as shown.

Re: claims 4, 9, and 17. Siegel et al. show in figures 1 and 3 a stop flange 100 which is provided at an end of the sleeve to be bent toward the high-pressure piston part.

Re: claim 5. Siegel et al. show in figure 1 a stop part 100 which is provided at an end of the sleeve, the stop part being thinner than the sleeve to be bent toward the high pressure piston part.

Re: claims 6, 12. Siegel et al. show in figure 1 the limitation wherein the (the end of the tapered part of the) low pressure piston part (near the motor element 56) has a smaller diameter than the high pressure piston part (particularly the portion of the high pressure piston part shown at the end of the lead line of number 60).

Re: claims 7, 8, 14, and 19. Siegel et al. show in figure 1 an inlet check valve 38 which is provided at an end of the high pressure piston part, the inlet check valve and the piston being integrally assembled with the sleeve as disclosed in col. 4 line 61 – col. 5 line 9 and mounted in the bore as disclosed in col. 5 lines 10-11. Examiner notes that the term “integral” is sufficiently broad to embrace constructions uniting by such means as fastening and welding. In re Hotte, 177 USPQ 326, 328 (CCPA 1973). Examiner notes that the claim is directed to a method of making the pump product and further notes that the MPEP section 2113 states that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Re: claims 10 and 16. Siegel et al. show in figure 1 an inlet hole 74 which is provided on the sleeve 12 at a position corresponding to an intermediate part between the low pressure piston part (the left surface of the low pressure piston part) and the high pressure piston part (the right surface of the high pressure piston part) to communicate with the inlet path 30.

Re: claim 15. Siegel et al. show in figure 1 the limitation wherein the low pressure piston part and the high pressure piston have a same outer diameter (particularly the untapered portion of the low pressure piston part and the portion shown in the area of the lead line of number 60 of the high pressure piston part) and are fitted in to the sleeve having a linear inner circumferential surface, as best understood.

Re: claim 18. Siegel et al. show in figure 1 a stop ring 58 which is fitted into a space between an end (the axially bottom end) of the sleeve and the low pressure piston part or in another interpretation in a space between an end (the radially innermost end) of the sleeve and the (radially outermost end) of the low pressure piston part.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siegel et al.



Re: claim 13. Siegel et al. show in figure 1 a low pressure piston part 20 and high pressure piston part 60 connected to each other, but do not specifically disclose that the parts are separately produced. In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except that in the prior art the cap is "press fitted" and therefore not manually removable. The court held that "if it were considered desirable for any reason to obtain access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose."). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the two piston parts to have been separately produced to provide distinct strength characteristics corresponding to the differing pressures subjected to each part. Examiner notes that the claim is directed to a method of making the pump product and further notes that the MPEP section 2113 states that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

11. Claims 1-3, 10-12, 15, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6070951 to Nakazawa in view of Prior art figure 1 of the instant application.

Re: claims 1, 3, 15. Nakazawa shows in figure 2 a pump for antilock brake system comprising a motor M shown in figure 1 and including element 4c shown in figure 2, a modular block 40, a plug 47 mounted to an end of the bore to be opposite to the motor (particularly portion 4c of the motor), a piston 45 provided in the bore to reciprocate in the bore by the motor, and a sleeve 46 fitted into the bore to guide a reciprocating motion of the piston.

Nakazawa fails to show the limitation of the motor being installed in the bore. Prior art figure 1 shows the limitation of a pump having a motor 2 being installed in the bore 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the pump of Nakazawa to have include the parts of the motor being installed in the bore, as taught by prior art figure 1, in order to protect the motor and its parts from foreign debris and also to locate the motor and its parts close to the components of the pump to reduce the number of parts necessary to transmit power from the motor to the pump components.

Re: claim 2. See figure 2 wherein the inlet path is designated by element number 4k.

Re: claims 10, 16. Nakazawa shows in figure 2 an inlet hole 46b which is provided on the sleeve at a position corresponding to an intermediate part between the low-pressure piston part shown below element 45a and the high pressure piston part shown above element 45a to communicate with the inlet path 4k.

Re: claim 11. Nakazawa shows in figure 2 at least one groove shown surrounding element 46d which is provided around the outer circumferential surface of the sleeve so that a sealing member 46d is fitted over the groove.

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Re: claim 12. Nakazawa shows in figure 2 the tapered portion of the low pressure piston part having a smaller diameter than the high pressure piston part.

Re: claim 18. Nakazawa shows in figure 2 a stop ring 4g which is fitted into a space between an end of the sleeve and the low pressure piston part.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 5236253 to Glasmacher and 5588817 to Zirps et al. are directed pumps including a sleeve in which the piston reciprocates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*mmb*  
mmb

November 19, 2004

*Melody M. Bunch*  
11/19/04